PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: LUCY J. BILLINGS
INCYTE PHARMACEUTICALS, INC.
3174 PORTER DRIVE
PALO ALTO, CALIFORNIA 94304
UNITED STATES OF AMERICA

PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing *(day month year)*	13 APR 2001

Applicant's or agent's file reference	IMPORTANT NOTIFICATION
PB-0005 PCT	

International application No.	International filing date *(day/month/year)*	Priority Date *(day/month/year)*
PCT/US99/25457	28 OCTOBER 1999	06 NOVEMBER 1998

Applicant
INCYTE PHARMACEUTICALS, INC.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.

2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.

3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US	Authorized officer
Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	JOHN LEGUYADER
Facsimile No. (703) 305-3230	Telephone No. (703) 308-0196

Form PCT/IPEA 416 (July 1992)★

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PB-0005 PCT	**FOR FURTHER ACTION**	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US99/25457	International filing date *(day month year)* 28 OCTOBER 1999	Priority date *(day month year)* 06 NOVEMBER 1998
International Patent Classification (IPC) or national classification and IPC Please See Supplemental Sheet.		
Applicant INCYTE PHARMACEUTICALS, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets.

   ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
02 JUNE 2000	18 MARCH 2001
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer JOHN LEGUYADER Telephone No. (703) 308-0196

Form PCT/IPEA/409 (cover sheet) (July 1998)★

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT US99 25457

I. Basis of the report

1. With regard to the **elements** of the international application:*

☐ the international application as originally filed

☒ the description:
pages 1-23 , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of _____

☒ the claims:
pages 24-26 , as originally filed
pages NONE , as amended (together with any statement) under Article 19
pages NONE , filed with the demand
pages NONE , filed with the letter of _____

☒ the drawings:
pages NONE , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of _____

☒ the sequence listing part of the description:
pages 1-6 , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in printed form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

☒ the description, pages NONE

☒ the claims, Nos. NONE

☒ the drawings, sheets/~~fig~~ NONE

5. ☐ This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* *Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).*

** *Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.*

International application No.
PCT US99 25457

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 statement

Novelty (N)	Claims	2, 4-8, 13	YES
	Claims	1, 3, 9-12, 14	NO
Inventive Step (IS)	Claims	2, 4-8, 13	YES
	Claims	1, 3, 9-12, 14	NO
Industrial Applicability (IA)	Claims	1-14	YES
	Claims	1-14	NO

2. citations and explanations (Rule 70.7)

ClaimS 1, 3, 9-12 and 14 lack novelty under PCT Article 33(2) as being anticipated by The Regents of the University of California (WO 94/294324).

Claims 1 and 3 are drawn to substantially purified polynucleotides and polypeptides comprising a gene or gene product that is coexpressed with one or more known corticosteroid synthesis genes in a plurality of biological samples, wherein each known corticosteroid synthesis gene is selected from the group consisting of steroid acute regulatory gene, p450 cholesterol side-chain cleavage enzyme, 3-beta-hydroxysteroid dehydrogenase, Type I 3-beta-hydroxysteroid dehydrogenase, Type II 3-beta-hydroxysteroid dehydrogenase, P450c11 beta-hydroxylase, and P450c17 alpha-hydroxylase.

Claims 9-12 and 14 are drawn to methods for diagnosing, treating or preventing a disease or condition associated with the altered expression of a gene that is coexpressed with one or more known corticosteroid synthesis genes, wherein each known corticosteroid synthesis gene is selected from the group consisting of steroid acute regulatory gene, p450 cholesterol side-chain cleavage enzyme, 3-beta-hydroxysteroid dehydrogenase, type I 3-beta-hydroxysteroid dehydrogenase, type II 3-beta-hydroxysteroid dehydrogenase, P450c11 beta-hydroxylase, and p450c17 alpha-hydroxylase.

WO 94/29434 teaches fusion enzymes, nucleic acid constructs and protein construct, for co-expression of P450scc with other gene products (see summary of invention, page 9). They teach the relationship of the expression of such corticosteroid synthesis genes to known diseases (see page 4, lines 9-29) and methods for expression of such enzymes for treatment purposes (see for instance pages 14-33).

Claims 2, 4-8 and 13 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest the specific sequence identifiers claimed.

---------- NEW CITATIONS ----------

NONE

International application No.
PCT US99 25457

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of Boxes I - VIII

CLASSIFICATION:

The International Patent Classification (IPC) and or the National classification are as listed below:
IPC(7): C12Q 1/68; C07H 21/02; C07K 1/00; A01N 37/18; A61K 38/28 and US Cl.: 435/6; 536/23.1; 530/350; 514/2, 44

09/830913

PATENT COOPERATION TREATY

PCT

REC'D 18 APR 2001

WIPO PC

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PB-0005 PCT	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT IPEA 416)
International application No. PCT/US99/25457	International filing date *(day month year)* 28 OCTOBER 1999	Priority date *(day month year)* 06 NOVEMBER 1998
International Patent Classification (IPC) or national classification and IPC Please See Supplemental Sheet.		
Applicant INCYTE PHARMACEUTICALS, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
02 JUNE 2000	18 MARCH 2001
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer JOHN LEGUYADER Telephone No. (703) 308-0196

Form PCT IPEA 409 (cover sheet) (July 1998)★

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No
PCT US99 25457

I. Basis of the report

1. With regard to the **elements** of the international application:*

[ ] the international application as originally filed

[X] the description
pages 1-23 , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of

[X] the claims
pages 24-26 , as originally filed
pages NONE , as amended (together with any statement) under Article 19
pages NONE , filed with the demand
pages NONE , filed with the letter of

[X] the drawings
pages NONE , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of

[X] the sequence listing part of the description
pages 1-6 , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

[ ] the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

[ ] the language of publication of the international application (under Rule 48.3(b)).

[ ] the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

[ ] contained in the international application in printed form.

[ ] filed together with the international application in computer readable form.

[ ] furnished subsequently to this Authority in written form.

[ ] furnished subsequently to this Authority in computer readable form.

[ ] The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

[ ] The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. [X] The amendments have resulted in the cancellation of:

[X] the description, pages NONE

[X] the claims, Nos. NONE

[X] the drawings, sheets~~fig~~ NONE

5. [ ] This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

** Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).*

*** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.*

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No
PCT US99 25457

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 statement

Novelty (N)	Claims	2, 4-8, 13	YES
	Claims	1, 3, 9-12, 14	NO
Inventive Step (IS)	Claims	2, 4-8, 13	YES
	Claims	1, 3, 9-12, 14	NO
Industrial Applicability (IA)	Claims	1-14	YES
	Claims	1-14	NO

2 citations and explanations (Rule 70.7)

ClaimS 1, 3, 9-12 and 14 lack novelty under PCT Article 33(2) as being anticipated by The Regents of the University of California (WO 94/294324).

Claims 1 and 3 are drawn to substantially purified polynucleotides and polypeptides comprising a gene or gene product that is coexpressed with one or more known corticosteroid synthesis genes in a plurality of biological samples, wherein each known corticosteroid synthesis gene is selected from the group consisting of steroid acute regulatory gene, p450 cholesterol side-chain cleavage enzyme, 3-beta-hydroxysteroid dehydrogenase, Type I 3-beta-hydroxysteroid dehydrogenase, Type II 3-beta-hydroxysteroid dehydrogenase, P450c11 beta-hydroxylase, and P450c17 alpha-hydroxylase.

Claims 9-12 and 14 are drawn to methods for diagnosing, treating or preventing a disease or condition associated with the altered expression of a gene that is coexpressed with one or more known corticosteroid synthesis genes, wherein each known corticosteroid synthesis gene is selected from the group consisting of steroid acute regulatory gene, p450 cholesterol side-chain cleavage enzyme, 3-beta-hydroxysteroid dehydrogenase, type I 3-beta-hydroxysteroid dehydrogenase, type II 3-beta-hydroxysteroid dehydrogenase, P450c11 beta-hydroxylase, and p450c17 alpha-hydroxylase.

WO 94/29434 teaches fusion enzymes, nucleic acid constructs and protein construct, for co-expression of P450scc with other gene products (see summary of invention, page 9). They teach the relationship of the expression of such corticosteroid synthesis genes to known diseases (see page 4, lines 9-29) and methods for expression of such enzymes for treatment purposes (see for instance pages 14-33).

Claims 2, 4-8 and 13 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest the specific sequence identifiers claimed.

---------- NEW CITATIONS ----------

NONE

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of Boxes I - VIII

CLASSIFICATION:

The International Patent Classification (IPC) and or the National classification (s) as listed below:

IPC(7): C12Q 1 68, C07H 21 02, C07K 1 00, A01N 37 18, A61K 38 28 and US Cl.: 435 6, 536 23.1, 530 350, 514 2, 44

US

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	**FOR FURTHER ACTION** see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
PB-0005PCT		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/US 99/25457	28/10/1999	06/11/1998
Applicant		
INCYTE PHARMACEUTICALS et al		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language,** the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☒ contained in the international application in written form.

☒ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readble form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☒ **Unity of invention is lacking** (see Box II).

4. With regard to the **title,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. -

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No
PCT/US 99/25457

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-3, 5-14 partially

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-3, 5-14 partially

Polynucleotide comprising a gene that is coexpressed with one or more known corticosteroid genes, as in Seq. ID NO : 1; fragments,antibodies compositions, potential therapeutic use

2. Claims: 1-14 partially

Polynucleotide comprising a gene that is coexpressed with one or more known corticosteroid genes, as in Seq. ID NO : 2; and corresponding proteins (SEQ ID NO 8);fragments, antibodies compositions, potential therapeutic use

3. Claims: 1-3, 5-14 partially

Polynucleotide comprising a gene that is coexpressed with one or more known corticosteroid genes, as in Seq. ID NO : 3; and corresponding protein ;fragments, antibodies compositions, potential therapeutic use

4. Claims: 1-3, 5-14 partially

Polynucleotide comprising a gene that is coexpressed with one or more known corticosteroid genes, as in Seq. ID NO : 4; and corresponding protein ;fragments, antibodies compositions, potential therapeutic use

5. Claims: 1-3, 5-14 partially

Polynucleotide comprising a gene that is coexpressed with one or more known corticosteroid genes, as in Seq. ID NO : 5; and corresponding protein ;fragments, antibodies compositions, potential therapeutic use

6. Claims: 1-14 partially

Polynucleotide comprising a gene that is coexpressed with one or more known corticosteroid genes, as in Seq. ID NO : 6; and corresponding protein (SEQ ID NO 9);fragments, antibodies compositions, potential therapeutic use

7. Claims: 1-3, 5-14 partially

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Polynucleotide comprising a gene that is coexpressed with one or more known corticosteroid genes, as in SEQ. ID NO : 7; and corresponding protein;fragments, antibodies compositions, potential therapeutic use

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 99/25457

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/12 C07K14/47 C12N15/11 C07K16/18 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 94 29434 A (UNIV CALIFORNIA ;MILLER WALTER L (US); HARIKRISHNA JENNIFER A (MY)) 22 December 1994 (1994-12-22)	1,3, 9-12,14
Y	claims 1-33	2,5-8,13

Y	WO 98 39446 A (UUMAN GENOME SCIENCE) 6 March 1998 (1998-03-06) SEQ IDs 26, 94 claims 1-23	2,5-8,13

Y	DATABASE EMBL [Online] EBI, Hinxton, UK AC : AI086606, 18 August 1998 (1998-08-18) NCI-CGAP: XP002137347 abstract	2,5-8,13

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
10 May 2000	05. 10. 00

Name and mailing address of the ISA	Authorized officer
European Patent Office, P B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx 31 651 epo nl, Fax: (+31-70) 340-3016	Nauche, S

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Form PCT/ISA/210 (second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 99/25457

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DATABASE EMBL [Online] EBI, Hinxton, UK AC : AA146966, 14 December 1996 (1996-12-14) HILLIER, L. ET AL.: "The WashU-Merck EST Project" XP002137348 abstract -----	2,5-8,13

2

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US 99/25457

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9429434 A	22-12-1994	US 5547868 A	20-08-1996
		US 5939318 A	17-08-1999
WO 9839446 A	11-09-1998	AU 6545398 A	22-09-1998
		EP 0972029 A	19-01-2000
		EP 0972030 A	19-01-2000
		WO 9839448 A	11-09-1998

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 :
C12N 15/12, C07K 14/47, C12N 15/11, C07K 16/18, A61K 38/17

A2

(11) International Publication Number: **WO 00/28027**

(43) International Publication Date: 18 May 2000 (18.05.00)

(21) International Application Number: PCT/US99/25457

(22) International Filing Date: 28 October 1999 (28.10.99)

(30) Priority Data:
60/155,269 6 November 1998 (06.11.98) US

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application
US 60/155,269 (CIP)
Filed on 6 November 1998 (06.11.98)

(71) Applicant *(for all designated States except US)*: INCYTE PHARMACEUTICALS, INC. [US/US]; 3174 Porter Drive, Palo Alto, CA 94304 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: WALKER, Michael, G. [CA/US]; Unit 80, 1050 Borregas Avenue, Sunnyvale, CA 94089 (US). VOLKMUTH, Wayne [US/US]; 783 Roble Avenue #1, Menlo Park, CA 94025 (US). KLINGLER, Tod, M. [US/US]; 28 Dover Court, San Carlos, CA 94070 (US).

(74) Agents: BILLINGS, Lucy, J. et al.; Incyte Pharmaceuticals, Inc., 3174 Porter Drive, Palo Alto, CA 94304 (US).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published
Without international search report and to be republished upon receipt of that report.

(54) Title: CORTICOSTEROID SYNTHESIS–ASSOCIATED GENES

(57) Abstract

The invention provides novel corticosteroid synthesis–associated genes and polypeptides encoded by those genes. The invention also provides expression vectors, host cells, antibodies, antisense molecules and ribozymes. The invention also provides methods for diagnosing, treating or preventing diseases associated with the altered expression of corticosteroid synthesis–associated genes.

FOR THE PURPOSES OF INFORMATION ONLY

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